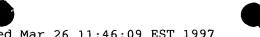


L1	35978	S	395/?	/CCLS
L2	29	S	L1 AN	O (SINGLE (1A) CHIP (5A) PROCESSOR?)/AB
L3	0	S	L2 AN	O (VARIABLE (5A) SPEED (5A) CLOCK?)
L4	16	S	L1 AN	O (VARIABLE (3A) SPEED (5A) CLOCK?)
L5	369	S	L1 AN	O (SINGLE (2A) CHIP (5A) PROCESSOR?)
L6	0	S	L4 AN	D L5
L7	289	S	L1 AN	O (VARIABLE (5A) CLOCK?)
L8	11	S	L5 AN	D L7
L9	25	S	L1 AN	O (PROCESSOR? AND CLOCK? AND CHIP?)/AB
L10	218	S	L1 AN	O (PROCESSOR? AND CHIP?)/AB
L11	0	S	L10 A	ND (VARIABLE (5A) CLOCK?)



```
=> s 395/?/ccls
         35978 395/?/CCLS
=> s l1 and (single (1a) chip (5a) processor?)/ab
         83017 SINGLE/AB
         10969 CHIP/AB
         17446 PROCESSOR?/AB
            43 (SINGLE (1A) CHIP (5A) PROCESSOR?)/AB
            29 L1 AND (SINGLE (1A) CHIP (5A) PROCESSOR?)/AB
L2
=> s 12 and (variable (5a) speed (5a) clock?)
        292127 VARIABLE
        520828 SPEED
                 258622 CLOCK?
           143 VARIABLE (5A) SPEED (5A) CLOCK?
L3
             O L2 AND (VARIABLE (5A) SPEED (5A) CLOCK?)
=> s l1 and (variable (3a) speed (5a) clock?)
        292127 VARIABLE
        520828 SPEED
                 258622 CLOCK?
           119 VARIABLE (3A) SPEED (5A) CLOCK?
L4
            16 L1 AND (VARIABLE (3A) SPEED (5A) CLOCK?)
=> s l1 and (single (2a) chip (5a) processor?)
        890378 SINGLE
         84891 CHIP
               99027 PROCESSOR?
           714 SINGLE (2A) CHIP (5A) PROCESSOR?
           369 L1 AND (SINGLE (2A) CHIP (5A) PROCESSOR?)
L5
=> s 14 and 15
             0 L4 AND L5
L6
=> s l1 and (variable (5a) clock?)
              292127 VARIABLE
        258622 CLOCK?
          2969 VARIABLE (5A) CLOCK?
           289 L1 AND (VARIABLE (5A) CLOCK?)
L7
=> s 15 and 17
            11 L5 AND L7
=> d 18 kwic 1-11
US PAT NO:
               5,615,402 [IMAGE AVAILABLE]
                                                        L8: 1 of 11
US-CL-CURRENT: <u>395/800</u>; 364/704, 736, 748; <u>395/250</u>, <u>410</u>, <u>467</u>
DETDESC:
DETD (27)
```

The EX stages, EXX and EXY, perform the operations defined by the instruction. Instructions spend a variable number of clocks in EX, i.e., they are allowed to execute out of order (out of order completion). Both EX stages include adder,. . .

DAVID Y. ENG

DETDESC:

DETD (36)

Referring to FIG. 2, for the exemplary embodiment, microprocessor 10 is used in a <u>processor</u> system that includes a <u>single chip</u> memory and bus controller 82. The memory/bus controller 82 provides the interface between the microprocessor and the external memory subsystem--level. . .

US PAT NO:

5,611,071 [IMAGE AVAILABLE]

L8: 2 of 11

US-CL-CURRENT: 395/460, 307, 403, 470, 471, 473, 496, 855

DETDESC:

DETD (48)

The execution stages EXX and EXY perform the operations defined by the instruction. Instructions spend a <u>variable</u> number of <u>clocks</u> in EX, i.e., they are allowed to execute out of order (out of order completion). Both EX stages include adder,. . .

DETDESC:

DETD (52)

Referring to FIG. 2, for the exemplary embodiment, microprocessor 10 is used in a <u>processor</u> system that includes a <u>single chip</u> memory and bus controller 82. The memory/bus controller 82 provides the interface between the microprocessor and the external memory subsystem--level. . .

US PAT NO:

5,596,740 [IMAGE AVAILABLE]

L8: 3 of 11

US-CL-CURRENT: 395/484; 364/DIG.1, DIG.2; 365/189.02, 230.02, 230.03; 395/454

DETDESC:

DETD (32)

The execution stages EXX and EXY perform the operations defined by the instruction. Instructions spend a $\underline{variable}$ number of \underline{clocks} in EX, i.e., they are allowed to execute out of order (out of order completion). Both EX stages include adder,. . .

DETDESC:

DETD(34)

Referring to FIG. 2, for the exemplary embodiment, microprocessor 10 is used in a $\underline{processor}$ system that includes a \underline{single} \underline{chip} memory and bus controller 82. The memory/bus controller 82 provides the interface between the microprocessor and the external memory subsystem--level. . .

US PAT NO:

5,596,731 [IMAGE AVAILABLE]

L8: 4 of 11

US-CL-CURRENT: 395/309, 449, 855

DETDESC:

DETD(33)

The execution stages EXX and EXY perform the operations defined by the instruction. Instructions spend a **variable** number of **clocks** in EK i.e.,

Wed Mar 26 11:46:09 EST 1997



they are allowed to execute out of order (out of order completion). Both EX stages include adder,.

DETDESC:

DETD(36)

Referring to FIG. 2, for the exemplary embodiment, microprocessor 10 is used in a processor system that includes a single chip memory and bus controller 82. The memory/bus controller 82 provides the interface between the microprocessor and the external memory subsystem--level.

US PAT NO: 5,584,009 [IMAGE AVAILABLE] L8: 5 of 11 US-CL-CURRENT: 395/444; 364/261.5, 261.7, DIG.1; 395/445, 449, 464

DETDESC:

DETD(27)

The execution stages EXX and EXY perform the operations defined by the instruction. Instructions spend a variable number of clocks in EX, i.e., they are allowed to execute out of order (out of order completion). Both EX stages include adder,. .

DETDESC:

DETD (36)

Referring to FIG. 2, for the exemplary embodiment, microprocessor 80 is used in a processor system that includes a single chip memory and bus controller 82. The memory/bus controller 82 provides the interface between the microprocessor and the external memory subsystem -- level.

5,471,598 [IMAGE AVAILABLE] L8: 6 of 11 US-CL-CURRENT: 395/449; 364/231.8, 243.4, 243.41, 964, 964.2, DIG.1, DIG.2; <u>395/394</u>, <u>465</u>, <u>467</u>, <u>496</u>, <u>800</u>

DETDESC:

DETD (27)

The execution stages EXX and EXY perform the operations defined by the instruction. Instructions spend a $\underline{variable}$ number of \underline{clocks} in EX, i.e., they are allowed to execute out of order (out of order completion). Both EX stages include adder,.

DETDESC:

DETD(36)

Referring to FIG. 2, for the exemplary embodiment, microprocessor 80 is used in a processor system that includes a single chip memory and bus controller 82. The memory/bus controller 82 provides the interface between the microprocessor and the external memory subsystem -- level.

5,428,746 [IMAGE AVAILABLE] L8: 7 of 11 US-CL-CURRENT: 395/306; 364/925.6, 926.92, 926.93, DIG.2; 395/280, 800

CLAIMS:



CLMS (10)

10. A <u>processor</u> formed on a <u>single</u> integrated circuit <u>chip</u>, comprising: means receiving a fixed frequency clock signal for providing an internal <u>clock</u> signal and a <u>variable</u> frequency <u>clock</u> signal, said <u>variable</u> frequency <u>clock</u> signal having a frequency set by a first control signal that is less than that of said internal clock signal,

means. . . a plurality of protocols designated by said second control signal, said input-output timing signal generating means being operated from said variable frequency clock signal,

means responsive to a memory device read or write instruction decoded by said decoding means for generating memory address strobe. . .

US PAT NO: 5,341,470 [IMAGE AVAILABLE] L8: 8 of 11

US-CL-CURRENT: 345/185; 395/509

DETDESC:

DETD (82)

One of the reasons why so much imaging capability is available under the system shown is that the <u>single chip</u> 5200 contains several <u>processors</u> working in parallel together with several memories, all accessible under a crossbar switch which allows for substantially instantaneous rearrangement of. . .

DETDESC:

DETD (97)

FIG. . . . BLANK-. Blanking for VGA is given a fixed switch-selected delay in circuit 4321. Blanking BLANK- passes through a 0-32 dot <u>clock</u> period mode dependent <u>variable</u> delay circuit 4322 followed by the delay in circuit 4321. The sync signals VSYNC- and HSYNC- are delayed by a. . .

DETDESC:

DETD (326)

Blanking . . . fixed delay F2 compensates for the circuit delays of the LUT, other logic and digital to analog converters 4030. The $\underline{variable}$ delay of 2N dot \underline{clocks} recognizes that t

he selector circuit 4051 coacts with LUT

and DACs to process color codes according to different modes to. . .

US PAT NO: 5,309,551 [IMAGE AVAILABLE] L8: 9 of 11

US-CL-CURRENT: 395/131; 345/199; 395/503, 509

DETDESC:

DETD (82)

One of the reasons why so much imaging capability is available under the system shown is that the <u>single chip</u> 5200 contains several <u>processors</u> working in parallel together with several memories, all accessible under a crossbar switch which allows for substantially instantaneous rearrangement of. . .

DETDESC:

DAVID Y. ENG



DETD (97)

FIG. . . . BLANK-. Blanking for VGA is given a fixed switch-selected delay in circuit 4321. Blanking BLANK- passes through a 0-32 dot <u>clock</u> period mode dependent <u>variable</u> delay circuit 4322 followed by the delay in circuit 4321. The sync signals VSYNC- and HSYNC- are delayed by a. . .

DETDESC:

DETD (326)

Blanking . . . fixed delay F2 compensates for the circuit delays of the LUT, other logic and digital to analog converters 4030. The <u>variable</u> delay of 2N dot <u>clocks</u> recognizes that t he selector circuit 4051 coacts with LUT and DACs to process color codes according to different modes to . . .

US PAT NO: 5,293,468 [IMAGE AVAILABLE] L8: 10 of 11

US-CL-CURRENT: 395/131, 501

DETDESC:

DETD(83)

One of the reasons why so much imaging capability is available under the system shown is that the \underline{single} \underline{chip} 5200 contains several $\underline{processors}$ working in parallel together with several memories, all accessible under a crossbar switch which allows for substantially instantaneous rearrangement of. . .

DETDESC:

DETD (98)

FIG. . . . BLANK-. Blanking for VGA is given a fixed switch-selected delay in circuit 4321. Blanking BLANK- passes through a 0-32 dot $\underline{\textbf{clock}}$ period mode dependent $\underline{\textbf{variable}}$ delay circuit 4322 followed by the delay in circuit 4321. The sync signals VSYNC- and HSYNC- are delayed by a. . .

DETDESC:

DETD (325)

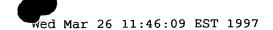
Blanking . . . fixed delay F2 compensates for the circuit delays of the LUT, other logic and digital to analog converters 4030. The $\underline{variable}$ delay of 2N dot \underline{clocks} recognizes that t he selector circuit 4051 coacts with LUT and DACs to process color codes according to different modes to . . .

CLAIMS:

CLMS(7)

7. The palette device of claim 1 wherein the palette device includes a clock control circuit supplying **clock** pulses, and said **variable** delay circuit includes a series of flip-flops clocked by said clock pulses from said clock control circuit, the series of. . .

US PAT NO: 4,989,133 [IMAGE AVAILABLE] L8: 11 of 11 US-CL-CURRENT: **395/672**; 364/242.6, 242.8, 245.5, 245.9, 247, 247.8, 254,





254.6, 271, 271.3, 280, 281.3, 281.4, 281.8, DIG.1; 395/680

DETDESC:

DETD(2)

The microcomputer described in this example comprises an integrated circuit device in the form of a \underline{single} silicon \underline{chip} having both a $\underline{processor}$ and memory in the form of RAM as well as links to permit external communication. The main elements of the. . .

DETDESC:

DETD(137)

assigns the current value of the processor's $\underline{\textbf{clock}}$ to the $\underline{\textbf{variable}}$. A "timer" input is represented as

=> d his

(FILE 'USPAT' ENTERED AT 11:34:34 ON 26 MAR 1997)

SET PAGE SCROLL L1 35978 S 395/?/CCLS L2 29 S L1 AND (SINGLE (1A) CHIP (5A) PROCESSOR?)/AB L3 0 S L2 AND (VARIABLE (5A) SPEED (5A) CLOCK?) L4 16 S L1 AND (VARIABLE (3A) SPEED (5A) CLOCK?) L5 369 S L1 AND (SINGLE (2A) CHIP (5A) PROCESSOR?) L6 0 S L4 AND L5 L7 289 S L1 AND (VARIABLE (5A) CLOCK?)

L8 11 S L5 AND L7

=>



Wed Mar 26 09:56:40 EST 1997

26 MAR 1997 09:39:47

U.S. Patent & Trademark Office

P0003

=> s 395/?/ccls

35978 395/?/CCLS

=> s (cpu? (5a) clock? (5a) same (5a) chip?)/ab and l1

3187 CPU?/AB

18308 CLOCK?/AB

126218 SAME/AB

14799 CHIP?/AB

1 (CPU? (5A) CLOCK? (5A) SAME (5A) CHIP?)/AB

0 (CPU? (5A) CLOCK? (5A) SAME (5A) CHIP?)/AB AND L1 L2

=> s 11 and (cpu? (5a) clock? same (5a) chip?)

47295 CPU?

258622 CLOCK?

1584776 SAME

28 CLOCK? SAME

(CLOCK? (W) SAME)

119150 CHIP?

O CPU? (5A) CLOCK? SAME (5A) CHIP?

O L1 AND (CPU? (5A) CLOCK? SAME (5A) CHIP?)

=> s 11 and (cpu? (5a) clock? (5a) same (5a) chip?)

47295 CPU?

258622 CLOCK?

1584776 SAME

119150 CHIP?

3 CPU? (5A) CLOCK? (5A) SAME (5A) CHIP?

L4 2 L1 AND (CPU? (5A) CLOCK? (5A) SAME (5A) CHIP?)

=> d kwic 14 1-2

US PAT NO: 5,414,862 [IMAGE AVAILABLE] L4: 1 of 2 US-CL-CURRENT: 395/750; 364/273, 273.5, 948.4, 948.91, DIG.1, DIG.2

DETDESC:

L3

DETD(132)

. . embodiment of this invention will be described. In this embodiment, A comparator, up/down counter and digital comparator as well as CPU, ROM, RAM, timer and system clock generator are fabricated on the same chip. Further, as the reference value to be compared at the comparator, analog data stored in ROM are used, or analog.

4,819,164 [IMAGE AVAILABLE]

US-CL-CURRENT: 395/556; 364/232.8, 270, 270.1, 270.2, 271, 271.1, DIG.1;

<u>395/557</u>, <u>559</u>

DETDESC:

DETD(19)

During . . . slow clock signal can also be generated in conjunction with the Chip Enable Signal such that the rate of the clocking operation for the CPU 12 is reduced at the same time that a particular chip or peripheral

Wed Mar 26 09:56:40 EST 1997

device is enabled. These chip enable signals and slow clock signals are input to a gate array network.

=> s (cpu? (5a) clock? (5a) same (5a) chip?)

47295 CPU?

258622 CLOCK? 1584776 SAME

119150 CHIP?

3 (CPU? (5A) CLOCK? (5A) SAME (5A) CHIP?) L5

=> d kwic 15 1-3

US PAT NO:

5,414,862 [IMAGE AVAILABLE]

L5: 1 of 3

DETDESC:

DETD(132)

. . embodiment of this invention will be described. In this embodiment, A comparator, up/down counter and digital comparator as well as CPU, ROM, RAM, timer and system clock generator are fabricated on the same chip. Further, as the reference value to be compared at the comparator, analog data stored in ROM are used, or analog.

US PAT NO:

5,058,116 [IMAGE AVAILABLE]

L5: 2 of 3

ABSTRACT:

A . . . and correcting technique. When a single error is detected, a cycle is inserted by the control circuitry of the cache chip. At the same time, the **clocks** for the **CPU** are held high until release d by the cache chip on the next cycle. Error correction on multi-byte data is performed.

US PAT NO:

4,819,164 [IMAGE AVAILABLE]

L5: 3 of 3

DETDESC:

DETD (19)

During . . . slow clock signal can also be generated in conjunction with the Chip Enable Signal such that the rate of the clocking operation for the CPU 12 is reduced at the same time that a particular chip or peripheral device is enabled. These chip enable signals and slow clock signals are input to a gate array network.

=>